

Title (en)
RECOMBINANT L-ASPARAGINASE FROM ZYMOMONAS

Title (de)
REKOMBINANTE L-ASPARAGINASE AUS ZYMOMONAS

Title (fr)
L-ASPARAGINASE RECOMBINANTE DE ZYMOMONAS

Publication
EP 3093344 A4 20170802 (EN)

Application
EP 14877857 A 20141229

Priority
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• BR 2014000455 W 20141229

Abstract (en)
[origin: EP3093344A1] The present invention relates to the construction and optimization of synthetic genes from the *Zymomonas mobilis* L-asparaginase gene, the method for cloning same and expression thereof in *Escherichia coli*. The purpose of the production of said enzyme is for producing high levels of a novel L-asparaginase that can be used in L-asparaginase-based pharmaceutical compositions for treating cancer, tumours and diseases involving cell proliferation, as well as for other medical applications.

IPC 8 full level
A61K 38/50 (2006.01); **A61P 35/02** (2006.01); **C12N 9/82** (2006.01); **C12N 15/55** (2006.01)

CPC (source: EP US)
A61P 35/02 (2017.12 - EP); **C12N 9/82** (2013.01 - EP US); **C12Y 305/01001** (2013.01 - EP US); **A61K 38/00** (2013.01 - EP US); **Y02A 50/30** (2017.12 - EP)

Citation (search report)
• [A] LONG LIU ET AL: "How to achieve high-level expression of microbial enzymes : Strategies and perspectives", BIOENGINEERED, vol. 4, no. 4, 1 July 2013 (2013-07-01), US, pages 212 - 223, XP055372171, ISSN: 2165-5979, DOI: 10.4161/bioe.24761
• [T] KAREN EINSFELDT ET AL: "Recombinant L-Asparaginase from *Zymomonas mobilis*: A Potential New Antileukemic Agent Produced in *Escherichia coli*", PLOS ONE, vol. 11, no. 6, 2 June 2016 (2016-06-02), pages e0156692, XP055381272, DOI: 10.1371/journal.pone.0156692
• [A] DATABASE UniProt [online] 1 February 2005 (2005-02-01), "SubName: Full=L-asparaginase, type II {ECO:0000313|EMBL:AAV90307.1}; EC=3.5.1.1 {ECO:0000313|EMBL:AAV90307.1};", XP002771078, retrieved from EBI accession no. UNIPROT:Q5NLV3 Database accession no. Q5NLV3
• See references of WO 2015103681A1

Designated contracting state (EPC)
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